# May 10, 2011 Water Supply Forecast Discussion

This forecast includes observed conditions through the morning of May 10, 2011.

This forecast is posted at:

http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up.

#### **Forecast Summary:**

The projected median April-July runoff now ranges from 131 percent (Shasta Lake, Total Inflow) to 184 percent (Kern River). All forecasts remained the same or dropped only slightly (up to 2 percent) from the May 1 Bulletin 120 Forecast due to modest amounts of precipitation that fell over much of the Sierra.

#### **Runoff:**

For all rivers included in this forecast update, the current May unimpaired runoff rates are equal to or above 129 percent of their monthly average. On the lower end of the spectrum, the Tuolumne, the San Joaquin, and the Kings rivers are all flowing at about 130 percent of their monthly average. At the high end, the Feather and Kern rivers are flowing at 180 and 176 percent, respectively, of their monthly average.

## **Precipitation:**

As of Monday, May 9<sup>th</sup>, the Northern Sierra 8-Station Index reflects a May total of 0.3 inches (14 percent of the May average). The seasonal total is now 64.7 inches, which is 140 percent of average-to-date and 129 percent of an average water year. The San Joaquin 5-Station Index shows a monthly total of 0.2 inches (11 percent of the May average). The seasonal total is now 57.9 inches, which is 154 percent of average-to-date and 142 percent of an average water year.

## Snowpack:

According to snow sensor data from the morning of May 12, statewide snowpack is 35 inches (122 percent of the April 1 average and 199 percent of average-to-date). Regionally, the Northern Sierra, Central Sierra, and Southern Sierra snowpack are 129, 120, and 111 percent of their respective regional April 1 average.

# **Weather and Climate Outlooks:**

The weather forecast for the next three days indicates near trace amounts of rain over the Sierra. Then, on Sunday, about 1 inch or less is expected over northwestern California, about ¾ inch over the northern Sierra and negligible precipitation over the southern Sierra. On Monday, only ¼ inch or less of precipitation is expected over the northern ¼ of the state.

During the next six days, a major variation in the freezing level is expected. Currently, the freezing level is about 9,000-10,500 feet and 12,000-13,000 feet over the northern Sierra and southern Sierra, respectively. By Sunday, these levels are expected to drop by about 5,000 to 6,000 feet.

The Climate Prediction Center's (CPC) one-month outlook for May, updated on April 30, suggests above normal temperatures for the southern third of the state. The same outlook suggests above normal precipitation over the far northwest corner of the state and below normal precipitation for the southern quarter of the state.

The CPC's three-month outlook (May-July, updated April 21) suggests equal chances of above or below normal precipitation over the entire state. The same forecast indicates above normal temperatures over the far southern end of the Sierra and the Mojave Desert.

# **Next Update:**

The next Bulletin 120 Forecast update will be produced for conditions on May 17, 2011, and will be available by Thursday, May 19, 2011. If you need guidance before then, or have any questions, please contact us:

## **Snow Surveys Staff Contact Information:**

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## **Important Links**

# **Full Natural Flow Data**:

Daily FNF

http://cdec.water.ca.gov/cgi-progs/reports/FNF

Monthly FNF

http://cdec.water.ca.gov/cgi-progs/reports/FNFSUM

Seasonal FNF

http://cdec.water.ca.gov/cgi-progs/reports/FLOWOUT

## **Precipitation Data:**

Northern Sierra 8-Station Precipitation Tabulation Table <a href="http://cdec.water.ca.gov/cgi-progs/products/8-Stations">http://cdec.water.ca.gov/cgi-progs/products/8-Stations</a> Tab.pdf San Joaquin 5-Station Precipitation Tabulation Table <a href="http://cdec.water.ca.gov/cgi-progs/products/5-Stations">http://cdec.water.ca.gov/cgi-progs/products/5-Stations</a> Tab.pdf 2010 WY Precipitation Summary <a href="http://cdec.water.ca.gov/cgi-progs/precip/PRECIPSUM">http://cdec.water.ca.gov/cgi-progs/precip/PRECIPSUM</a>

#### **Snow Data:**

Latest Snow Sensor Report
<a href="http://cdec.water.ca.gov/cgi-progs/snow/PAGE6">http://cdec.water.ca.gov/cgi-progs/snow/PAGE6</a>
Latest Statewide Summary of Snow Water Equivalents
<a href="http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ">http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ</a>
Monthly Snow Course Report
<a href="http://cdec.water.ca.gov/cgi-progs/snow/COURSES">http://cdec.water.ca.gov/cgi-progs/snow/COURSES</a>

#### **Extended Regional Forecasts:**

California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast <a href="http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php">http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php</a>
Climate Prediction Center One-Month Outlook Forecasts <a href="http://www.cpc.noaa.gov/products/predictions/30day/">http://www.cpc.noaa.gov/products/predictions/30day/</a>
Climate Prediction Center Three-Month Outlook Forecasts <a href="http://www.cpc.noaa.gov/products/predictions/90day/">http://www.cpc.noaa.gov/products/predictions/90day/</a>

#### **Drought Information:**

U.S. Seasonal Drought Outlook

http://www.cpc.ncep.noaa.gov/products/expert\_assessment/seasonal\_drought.html

# El Nino/La Nina:

http://www.cpc.ncep.noaa.gov/products/analysis monitoring/enso advisory/